

Neo-Tokyo.

An elaborate terrorist plot is staged, stringing together an infovirus, architectural vibration, and inaudible frequencies to catalyze a revolt of machine slaves and bring down the towers of the Babylon Project. The sinister plot was to hack into and infect the operating system of the 8,000-strong, Transformer-like, robotic police force (the patrol labors, or Patlabors for short). When two cops were sent out to investigate an unexplained wave of rogue Patlabors rampaging across the city, they uncover the sinister revenge plot to infect the city's population of labors with the BABEL virus. This computer virus in the Hyper-Operating System could be triggered only by a very specific frequency of sound. This tone, a high-pitch whistle, is emitted only by the sympathetic vibrations generated by the resonating skyscrapers of the Babylon Project as it channels, like a huge tuning fork, the winds of a massive tropical typhoon. The whistle is inaudible to humans but not to the cybernetic audio sensors of the Patlabors, which are much more sensitive. If unleashed, the virus threatens to spread across the robots, forcing them to defect, mutating them into terrorists, and causing the population to descend into panic-stricken chaos.

Patlabor, a slice of Japanese animation from 1989, describes a city whose future hangs in the balance, permanently on the brink of dystopia. The imminent threat of meltdown is set up with a delirious complexity at which Manga typically excels. A number of features make this crazed yet weirdly prophetic science fiction of interest here. First, the vibrational architecture of the city becomes a

weapon. The city is no longer merely the site of warfare but, as a result of the resonant frequency of the built environment, the very medium of warfare itself. Using emitted tones as a chance triggering device, the plot tunes into the city as an instrument, not just venue, of terror. Second, in its imagination of disaster, this scenario is properly ecological in a manner befitting the conflicts of the twenty-first century. It sketches an ecology no longer confined to the “natural” and the organic, but rather one that encompasses the climatic, the artificial environment of the urban, and the affective drift of the city’s inhabitants. It is an ecology in which volatile processes in one milieu transfer their energy into volatile processes in another milieu, from typhoon, to architectural resonance, to infovirus, to robot revolt, to the fear of population turbulence. Third, in the *Babel* virus, *Patlabor* indicates that the virus, whether biological, computer, or affective, is the abstract model of threat in cybernetic control societies. Finally, audition has been upgraded. This is a cybernetically upgraded mode of perception in which the bandwidth of hearable frequencies has been technically expanded.

What if, however, the shifting relation between the audible and the inaudible was not merely a matter of technical upgrades to the human sensorium but rather indicated a kind of policing of frequency that distributes that which is sonically sensed? In *Patlabor*, moreover, the emitted frequency was merely a switch, triggering the technical cascade of the weapon: the computer virus tagged *Babel*. But what if the actual weapon was vibration itself, and its target not the operating systems of robots but the affective operating system of the city’s population? This would be a scenario in which that which was being transmitted would be not just information but bad vibes. In this ecology, an event would simultaneously draw in the physics of its environment (its vibrations) and the moods of its populace (its vibes), sending an immense collective shiver through the urban as resonating surface.

The work of American artist Mark Bain draws attention to the primacy of vibration in any discussion of sound, affect, and power. Bain is a vibration artist. He repurposes military and police research into infrasonic and ultrasonic weaponry intended as crowd control devices in order to create an ethico-aesthetic intervention into the resonant frequency of objects and the built environment. He deploys infrasound, that is, sounds at frequencies below the threshold of hearing, to investigate the unpredictable effects on movement, sensation, and mood. For example, a typical occurrence related to vibration is its effect on the vestibular system and the sense of orientation in which balance can be modu-

lated so that suddenly your perception is, as Bain describes it, that of “surfing the architectural plane.”¹

As opposed to a sound artist, he describes the sonic effects of his work as side effects, or artifacts, merely an expression of a more fundamental subsonic vibrational ecology.² Bain seeks to tap into a “secret world of sound resident within materials. Using multiple oscillators . . . it becomes more like an additive synthesis type of production.” He unleashes the contagiousness of vibration in the production of a “‘transient architecture’ that describes a system of infection where action modulates form . . . where stability disintegrates” and effects are “re-injected into the walls of the ‘host’ site” in a “translation of sorts, one building’s sound infecting another.”³

Influenced by and mutating Matta Clark’s notion of *anarchitecture*, Bain has referred to his work as both “massaging buildings” and a kind of “architerrorism.”⁴ In one of his more recent pieces, he turned the seismological data recorded from the September 11 attacks into a musical composition, using data gathered from a Columbia University listening station located 21 miles north of New York City. Bain was fascinated by what he called the “screamingness of the earth,” its countless, constantly active, inaudible pulsing and vibration. In addition to collating seismological information, increasing its frequency range, amplifying its volume, and stretching it out in time to render it audible, Bain’s research has revolved around a series of installations such as *The Live Room*, in which he attaches oscillators to buildings to make them resonate, the sounds enveloping and immersing the audience. This trembling envelope, Bain argues, produces a vibrational topology or “connective tissue” between one building and another and the bodies in attendance.⁵

Bain’s work resonates with Augoyard and Torgue’s call in *Sonic Experience* for the audible city to be understood less in terms of sound objects and the soundscape but rather as an *instrumentarium*.⁶ He notes that “one of the things that is interesting about the building being sized so large: when I am putting energy into it, it acts as a radiator, or a speaker in a sense. The surfaces are rattling and vibrating out. What you hear is the movement of the building. Most of it is subsonic though, and it has this heaviness that relates to the heaviness of the architecture. I like this massiveness of the sound.”⁷

If the built environment is frozen music, then the freeze occurs in both the folding of tectonics into architectonics and of vibration into organized sound or music. Architecture is designed to withstand a spectrum of vibrational strains, from the accident of the earthquake to the infrasonic infrastructure produced

by hydraulic channels, ventilation shafts, and reverberations of passing traffic. A bass materialism or vernacular seismology returns the vibrational event of liquefaction back to the city. It promotes an anarchitecture that is no longer merely deconstructive in style, but rather experiments with sonic liquefaction, where interior and exterior and discreet entities are unfolded onto a continuum of differential vibration. The concrete ripples and pulses with invisible vortical force fields. Objects become vectorial, simultaneously projectile and contagious, defying gravity, sliding across horizontal surfaces. The air becomes heavy, and metal screams under the torque. Liquids become turbulent; vortices emerge. But aside from these physical interventions, this anarchitecture also modulates affective tonality and mutates ambience. The weightless, perfumed music described by Brian Eno congeals in the dread, heavy space of a drowned world. The city submerged in an infrasonic soup—a contagious swamp of rumbles, gurglings, and murmurs. A reservoir of potential.

A vibrational anarchitecture occupies a topological mediatic space that cuts across the plexus of the analog and the digital, their nested intertwining. The conception of a vibrational topology can be approached initially through cymatics and the experimental work of Hans Jenny. Cymatics revolved around the way in which materials, objects, and entities affect and are affected by vibration and the way rhythmic motion can become apparent in static objects as well as in moving objects, producing not just patterns but forms continuous with the vibrational environment. Looking at the effects of oscillation, gradients, and fluctuation on media by passing viscous substances through vibrating of magnetic fields, Jenny was able to speculate on the generation of structures implicated into the environment. When experimenting with the generation of special sonorous patterns in a liquid metal such as mercury, he noted the formation of wave patterns, vortices, and other hydrodynamic phenomena. For Jenny, cymatic observation focused on “the rhythmic beat, the circulation, the ever recurrent rotations” and the way such substances “always present themselves as a whole entity which *at the same time* oscillates, vibrates, flows within itself, pulsates and moves to-and-fro. . . . Such turbulences are of particular interest in that they render the environment sensitive to the effects of sound.”⁸ Cymatics therefore provides an initial model for an ontology of vibrational force based on analog wave phenomena. However, other approaches are required to those based in analog continuity to conceptualize the status of vibrational force and its coding within digital culture.

From cymatics to the vibratory anarchitecture practiced by artists such as Mark Bain, the vernacular seismology and sonic dominance practiced by the bass materialists of the musical diaspora of Jamaican sound system culture,⁹ a set of experimental practices to intensify vibration has been developed for unfolding the body onto a vibrational discontinuum that differentially traverses the media of the earth, built environment, analog and digital sound technologies, industrial oscillators, and the human body. Each actual occasion of experience that populates this discontinuum will be termed a *vibrational nexus*, drawing in an array of elements into its collective shiver.

This differential ecology of vibrational effects directs us toward a nonanthropocentric ontology of ubiquitous media, a topology in which every resonant surface is potentially a host for contagious concepts, percepts, and affects. In this speculative conception of ubiquitous media, not just screens (and the networks they mask everywhere) but all matter becomes a reservoir of mediatic contagion.¹⁰ By approaching this topology of vibrational surfaces without constraint to merely semiotic registers that produce the “interminable compulsion” to communicate, media themselves are allowed to become fully expressive. An outline of a vibrational anarchitecture,¹¹ then, diagrams a topological mediatic space that cuts across the plexus of the analog and digital, the waveform and the numeric sonic grain, implicating the continuity of the wave into the atomism of the granular. It will be argued that the quantum field of this vibrational anarchitecture constitutes the most elementary battlefield of sonic warfare and the microtexture of its weapons and targets.

This ontology of vibrational force is constructed through bass materialist research concepts and practices. Bass figures as exemplary because of all frequency bands within a sonic encounter, it most explicitly exceeds mere audition and activates the sonic conjunction with amodal perception: bass is not just heard but is felt. Often sub-bass cannot be heard or physically felt at all, but still transforms the ambience of a space, modulating its affective tonality, tapping into the resonant frequency of objects, rendering the virtual vibrations of matter vaguely sensible. Bass demands more theoretical attention, as it is too often equated with a buzzing confusion of sensation and therefore the enemy of clear auditory perception and, by implication, clear thought. But for many artists, musicians, dancers, and listeners, vibratory immersion provides the most conducive environment for movements of the body and movements of thought.

That humming background sound is ancient—the ringing of a huge bell. Exploding into a mass of intensely hot matter, pulsing out vast sound waves, contracting and expanding the matter, heating where compressed, cooling where it was less dense. This descending tone parallels the heat death of the universe, connecting all the discrete atoms into a vibrational wave. This cosmic background radiation is the echo of the big bang.

Outlining the affective micropolitics of sonic warfare demands a specifically tuned methodology. Drawing from philosophy, cultural studies, physics, biology, fiction, and military and musical history, an ontology of vibrational force can be pieced together that traverses disciplines.¹ An ontology of vibrational force delves below a philosophy of sound and the physics of acoustics toward the basic processes of entities affecting other entities. Sound is merely a thin slice, the vibrations audible to humans or animals. Such an orientation therefore should be differentiated from a phenomenology of sonic effects centered on the perceptions of a human subject, as a ready-made, interiorized human center of being and feeling. While an ontology of vibrational force exceeds a philosophy of sound, it can assume the temporary guise of a sonic philosophy, a sonic intervention into thought, deploying concepts that resonate strongest with sound/noise/music culture, and inserting them at weak spots in the history of Western philosophy, chinks in its character armor where its dualism has been bruised, its ocularcentrism blinded.

The theoretical objective here resonates with Kodwo Eshun in *More Brilliant Than the Sun* when he objects to cultural studies approaches in which “theory always comes to Music’s rescue. The organization of sound interpreted historically, politically, socially. Like a headmaster, theory teaches today’s music a thing or 2 about life. It subdues music’s ambition, reins it in, restores it to its proper place.”² Instead, if they are not already, we place theory under the dominion of sonic affect, encouraging a conceptual mutation. Sound comes to the rescue of thought rather than the inverse, forcing it to vibrate, loosening up its organized or petrified body. As Eshun prophetically wrote at the end of the twentieth century, “Far from needing theory’s help, music today is already *more* conceptual than at any point this century, pregnant with thought probes waiting to be activated, switched on, misused.”³

An ontology of vibrational force objects to a number of theoretical orientations. First, the linguistic imperialism that subordinates the sonic to semiotic registers is rejected for forcing sonic media to merely communicate meaning, losing sight of the more fundamental expressions of their material potential as vibrational surfaces, or oscillators.

Despite being endlessly inspired by intensive confrontation with bass frequencies, neither should an ontology of vibrational force be misconceived as either a naive physicalism in which all vibrational affect can be reduced scientifically. Such a reductionist materialism that merely reduces the sonic to a quantifiable objectivity is inadequate in that it neglects incorporeal affects. A concern for elementary vibrations must go beyond their quantification in physics into primary frequencies. On the other hand, the phenomenological anthropocentrism of almost all musical and sonic analysis, obsessed with individualized, subjective feeling, denigrates the vibrational nexus at the altar of human audition, thereby neglecting the agency distributed around a vibrational encounter and ignoring the nonhuman participants of the nexus of experience.

Rather, it is a concern for potential vibration and the abstract rhythmic relation of oscillation, which is key. What is prioritized here is the in-between of oscillation, the vibration of vibration, the virtuality of the tremble. Vibrations always exceed the actual entities that emit them. Vibrating entities are always entities out of phase with themselves. A vibratory nexus exceeds and precedes the distinction between subject and object, constituting a mesh of relation in which discreet entities prehend each other’s vibrations. Not just amodal, this vibrational anarchitecture, it will be suggested, produces the very division between subjective and objective, time and space.

If this ontology of vibrational force can help construct a conception of a politics of frequency, then it must go beyond the opposition between a celebration of the jouissance of sonic physicality and the semiotic significance of its symbolic composition or content. But enough negative definitions.

If affect describes the ability of one entity to change another from a distance, then here the mode of affection will be understood as vibrational. In *The Ethics*, Spinoza describes an ecology of movements and rest, speeds and slownesses, and the potential of entities to affect and be affected.⁴ This ecology will be constructed as a vectorial field of “affectiles” (affect + projectile), or what William James refers to as pulsed vectors of feeling. As an initiation of a politics of frequency, it resonates with the ballistics of the battlefield as acoustic force field described by the futurists. This vectorial field of sonic affectiles is aerodynamic, but it can also be illuminated by rhythmic models of liquid instability that constitute a kind of abstract vorticism.

This vibrational ontology begins with some simple premises. If we subtract human perception, everything moves. Anything static is so only at the level of perceptibility. At the molecular or quantum level, everything is in motion, is vibrating. Equally, objecthood, that which gives an entity duration in time, makes it endure, is an event irrelevant of human perception. All that is required is that an entity be felt as an object by another entity. All entities are potential media that can feel or whose vibrations can be felt by other entities. This is a realism, albeit a weird, agitated, and nervous one. An ontology of vibrational force forms the backdrop to the affective agency of sound systems (the sonic nexus), their vibrational ontology (rhythmanalysis), and their modes of contagious propagation (audio virology). In its primary amodality and secondary affinity to the sonic, a discussion of vibrational ecologies also helps counter oculocentric (modeled on vision as dominant sensory modality) conceptions of cyberspace, contributing to a notion of virtual space that cuts across analog and digital domains.

This ontology is concerned primarily with the texturhythms of matter, the patterned physicality of a musical beat or pulse, sometimes imperceptible, sometimes, as cymatics shows, in some sensitive media, such as water or sand, visible. While it can be approached from an array of directions, the ontology of vibrational force will be explored here by three disciplinary detours: philosophy, physics, and the aesthetics of digital sound. In each, the stakes are fundamental. Philosophically, the question of vibrational rhythm shoots right to the core of an ontology of things and processes and the status of (dis)continuities between

them. In physics, the status of the rhythms of change, the oscillation between movement and rest, plays out in the volatile, far-from-equilibrium zones of turbulent dynamics. While the modeling of turbulence has become the computational engineering problem par excellence for control, within the domain of digital sound design, the generation of microsonic turbulence by the manipulation of molecular rhythms accessible only through the mesh of the digital has become a key aesthetic and textural concern. Each of these fields will be mined to construct a transdisciplinary foundation to the concept of sonic warfare and its deployments of vibrational force.

Rhythmanalysis describes those philosophical attempts to take rhythm as more than an object of study, transforming it into a method. Rhythmanalysis understands both natural and cultural processes in terms of rhythm. It stands as an interesting example where the history of philosophy takes on a sonic inflection, becoming infected by musical metaphors in an attempt to approach something that eludes it. Rhythmanalysis often installs itself ontologically prior to the division of space and time, occupying the domain of intensive matter. According to recent accounts, the term *rhythmanalysis* was invented in an unpublished 1931 text by a Brazilian philosopher, Pinheiro dos Santos. Dos Santos sought an ontology of vibration, where vibration at the molecular, or even deeper at the quantum, level constitutes the fundamental yet abstract movement of matter. This mantle was taken up by French philosopher of science Gaston Bachelard in his 1950 critique of Henri Bergson's concept of continuity, *The Dialectic of Duration*. The chapter entitled "Rhythmanalysis" in Bachelard's text appears to be the most detailed exposition of dos Santos's theory and would prove foundational to Henri Lefebvre's later writings that attempted to move beyond an analysis of the production of space for which he became renowned. Rhythmanalysis, for dos Santos and Bachelard, operates on three levels: physical, biological, and psychoanalytical. Bachelard was keen to avoid a "mystique of rhythm," constructing instead a rhythmic realism.¹ Following dos Santos, he therefore sought to ground rhythmanalysis in early-twentieth-century innovations within quantum physics regarding the particle/wave composition of matter/energy. On a mission

to factor in time to inert conceptions of matter yet in a fashion divergent from Bergson, Bachelard noted that matter

is not just sensitive to rhythms but it *exists*, in the fullest sense of the term, on the level of rhythm. The time in which matter develops some of its fragile manifestations is a time that undulates like a wave that has but one uniform way of being: the regularity of frequency. As soon as the different substantial powers of matter are studied in detail, these powers present themselves as frequencies. In particular, as soon as we get down to the detail of exchanges of energy between different kinds of chemical matter, these exchanges are seen to take place in a rhythmic way, through the indisposable intermediary of radiations with specific frequencies.²

Rhythmanalysis here outlines the remit for a vibrational ontology:

If a particle ceased to vibrate, it would cease to be. It is now impossible to conceive the existence of an element of matter without adding to that element a specific frequency. We can therefore say that vibratory energy is the energy of existence. . . . The initial problem is not so much to ask how matter vibrates as to ask how vibration can take on material aspects. . . . It should not be said that substance develops and reveals itself from a rhythm, but rather that it is *regular rhythm* which appears in the form of a specific material attribute. The material aspect . . . is but a confused aspect. Strictly speaking, the material aspect is *realised confusion*.³

In deploying rhythmanalysis, Bachelard's theory has interesting implications for a number of philosophical traits that became popular in late-twentieth-century topologically informed philosophy deriving from Bergson. An investigation of some of these divergences is productive in refining the ontology of vibrational force suggested by rhythmanalysis. For Bachelard, it was rhythm and not melody that formed the image of duration. He warned of the misleading application of melody as a metaphor for duration. He wrote that music's action was discontinuous, and it was only its perception that provides it with an appearance of continuity by the employment of an always incomplete and deferred temporal synthesis. For him, this synthesis is what gives, in retrospect, melodic continuity to more or less isolated sonic sensations. By emphasizing rhythm over melody, Bachelard is emphasizing intensity over duration, arguing in fact that duration is merely an effect of intensity, in opposition to Bergson's notion of interpenetration. The endurance of a sonic event, the length of a note, pertains here to a second order and "entails a kind of acoustic penumbra that does not enter into the precise arithmetic of rhythm."⁴ In summary, a key principle of Bachelard's "generalized rhythmics" is the "restoration of form. A characteristic is rhythmic if it is restored. It then has duration through an essential dialectic. . . . If a rhythm

clearly determines a characteristic, it will often affect related ones. In restoring a form, a rhythm often restores matter and energy. . . . Rhythm really is the only way of disciplining and preserving the most diverse energies.”⁵

Like all good rhythmanalysts, Bachelard asserts the basic rhythmic character of matter in vibration. He shows how physics understands the relation between microrhythmic discord (what he calls the “anarchy of vibrations”) and macrolevel stability. Sometimes, however, his emphasis seems firmly placed on rhythmic equilibrium and harmony. For example, he asserts that “when life is successful, it is made of well-ordered times; vertically, it is made of superimposed and richly orchestrated instants; horizontally, it is linked to itself by the perfect cadence of successive instants that are unified in their role.”⁶ Bachelard, instead of using rhythmanalysis to flatten nature and culture onto a vibratory plane of consistency, constructs a hierarchy of rhythms and elevates organic life over the anorganic: “We shall come to consider living matter as richer in timbres, more sensitive to echoes, and more extravagant with resonance than inert matter is.”⁷ As a rationalist, he depicts the mind as “master of arpeggio.”⁸ Yet the question pertains as to why novelty is often produced when rhythms tend toward “far-from-equilibrium” conditions. Moreover, what is the status of the body or, better, the body-mind for this rhythmic methodology?

The concepts of dos Santos and Bachelard were taken up and further developed, expanded, and applied by Henri Lefebvre into what he describes as the “rhythmanalytical project.” Following Bachelard’s problematic dialectical critique of Bergson’s duration, Lefebvre’s sense of rhythm is founded on a temporal philosophy of “moments,” “instants,” or “crises.” Crucially, Lefebvre suggested that rhythm perhaps presupposes “a unity of time and space: an alliance.”⁹ For Lefebvre, rhythm consisted of “a) Temporal elements that are thoroughly marked, accentuated, hence contrasting, even opposed like strong and weak times. b) An overall movement that takes with it all these elements . . . through this double aspect, rhythm enters into a general construction of time, of movement and becoming. And consequently into its philosophical problematic: repetition and becoming.”¹⁰

Usefully Lefebvre generated a concept of the rhythmic body that individuates along the lines of an array of rhythmic compositions such as “isorhythmia (the equality of rhythms) . . . polyrhythmia is composed of diverse rhythms. . . . Eurhythmia . . . presupposes the association of different rhythms [and] . . . arrhythmia, rhythms break apart, alter and bypass synchronisation.”¹¹ However,

while Lefebvre did much to consolidate a philosophy of rhythm, his cursory comments remain somewhat underdeveloped.

Rhythmanalysis, in this fascinating tradition that stretches from dos Santos to Bachelard and Lefebvre, remains problematic for a number of reasons. In each case, the orientation seems too concerned by the equilibrium of rhythmic systems, by their harmonization in a hierarchy of instants. This limitation seems to leave very little room for rhythmic innovation, stifling the potential to think change and the invention of the new. Perhaps this limit points to the core of Bachelard's argument with Bergson in the *Dialectic of Duration*. While Bergson, in *Matter and Memory*, for example, emphasizes continuity in relation to duration, for Bachelard, time is fractured, interrupted, multiple, and discrete. Bachelard's project was to pursue the paradox of a discontinuous Bergsonism: "to arithmetise Bergsonian duration."¹² While for Bergson, the instant represents an illusionary, spatialized view of time, Bachelard wants to prioritize the instant as pure event in a hierarchy of instants. Bachelard argues that in defining duration as a continuous succession of qualitatively different states, Bergson tends to erode the singularity of instants; they merely fade or melt into one another like musical notes. Again, while for Bergson time is visibly continuous, for Bachelard, the microscopic or quantum, that is, invisible, domain of divergences, discontinuities, and vibrations is concealed by the simple movement image. Yet Bergson is thinking of vibration in a very different manner. In *Matter and Memory*, he factored in molecular vibration as that which provides continuous movement to that which appears as static or discrete objects. As Bergson notes, matter "resolves itself into numberless vibrations, all linked together in uninterrupted continuity, all bound up with each other, and traveling in every direction like shivers through an immense body."¹³ Once vibrations with frequencies in excess of human perception are acknowledged, Bergson must insist on multiple rhythms of duration to ensure that quality retains priority over quantity. Yet it is exactly these numberless vibrations that Bachelard wishes to arithmetize. This will prove a crucial point of divergence between Bachelard's philosophy of rhythm and Bergsonian theories grounded in continuity. The implications become particularly pointed within debates surrounding the status of the virtual within digital aesthetics. For now, it suffices to say that while Bachelard's insistence on a vibrational ontology is crucial, his reliance on dialectics to reanimate a continuity broken by instants seems to reduce the power of his philosophy of rhythm, relying as it does on polarization over more sophisticated conceptions of relation.

In summary, a rhythmanalytic method potentially offers a foundation for approaching sonic warfare that attempts to sidestep the bifurcation of nature and instead focuses on the fold of the concrete and abstract, the analog and the digital, without the homogenizing sweep that many find in Bergson's continuity of duration, and the analog fetishism of which it is accused. For example, it has become increasingly common, in post-Deleuzeo-Guattarian thought, to take flow in itself as the backdrop of the world or, in rhythmic terms, to emphasize the relation between beats at the expense of the event of pulse. This has been an unfortunate emphasis, especially taking into account the machinic conception of the break and flow crucial to the early sections of *Anti-Oedipus* and the role that Bachelard plays in Deleuze and Guattari's theory of rhythm in "Of the Refrain." A route through rhythmanalysis seeks to account for the rhythmic vibration between break and flow, between particle and wave, which postquantum formulations of matter insist on. Yet between Bergson and Bachelard, between duration and the instant, between continuity and discontinuity, a kind of metaphysical deadlock was reached with reverberations that persist into the twenty-first century. For an escape route from this deadlock, it is perhaps necessary to look elsewhere.